



# **Integrated Maintenance Data System (IMDS)**

## **Program Update March, 2002**

**PROGRAM MANAGER: Col Jan Kinner**



U.S. AIR FORCE

## PROGRAM DESCRIPTION

### IMDS

#### Goal

Re-engineer and modernize the existing maintenance legacy systems, stovepiped environment...to a single, integrated maintenance

#### Improvement

- Supports the EAF concept and Dominant Maneuver
- Accurate/Reliable data for C2
- Enterprise Asset Visibility
- Deployable
- Open systems architecture
- GCSS-AF compliant
- User friendly & reduces maintainer work
- Reduction in Total Ownership Costs

enterprise

#### Key Functional Capabilities:

- Automated Maintenance Data Collection
- Production Management
- Integrated Weapon System Management

**ACAT 1 AC**

PEO Program: C2&CS

Customer: HQ AF/ILM

Users: Air Force Maintenance

Personnel: Worldwide



U.S. AIR FORCE

# PROGRAM DESCRIPTION

## IMDS

### Goal

Re-engineer and modernize the existing maintenance legacy systems stovepiped environment... to a single, integrated maintenance

Program was designated a pilot program for the Rapid Improvement Team (RIT) for IT Acquisition Management Transformation by OSD on 21 Dec 2001; at same time IMDS was redesignated from an ACAT 1AM to an

### Improvement

- Supports the EAF concept and Dominant Maneuver

able data for C2  
t Visibility

architecture  
niant

- Reduction in Total Ownership Costs

enterprise

### Key Functional Capabilities:

- Automated Maintenance Data Collection
- Production Management
- Integrated Weapon System Management

**ACAT 1 AC**

PEO Program: C2&CS

Customer: HQ AF/ILM

Users: Air Force Maintenance

Personnel: Worldwide



U.S. AIR FORCE

## REQUIREMENTS GUIDANCE

### Rapid Improvement Team (RIT) - Key Tenets

- **Reduce program oversight**
  - ACAT IAM to ACAT IAC
- **Use EADR process vs Milestones and formal reporting**
- **Amount of risk and what you are doing about it determines amount of oversight received**
- **Change the way we do acquisition**
  - Out with what does not work
  - In with reduced cycle processes
- **Real time status reporting via Portal**
- **Reduce/Streamline Documentation Requirements**

• Document X vice SAMP, TEMP, LCCE, etc.  
**Increased Readiness & Combat Capability**  
• Capability delivered < 18 months



U.S. AIR FORCE

## REQUIREMENTS

### Rapid Improvement Team

- **Reduce program oversight**

- ACAT IAM to ACAT IAM

- **Use EADR process**
- **reporting**

- **Amount of risk and**
- **determines**

**amount of oversight received**

- **Change the way we do acquisition**

- Out with what does not work

- In with reduced cycle processes

- **Real time status reporting**

- **Reduce/Streamline Documentation Requirements**

- Document X vice SAMP, TEMP, LCCE, etc.

**Increased Readiness & Combat Capability**

Capability delivered < 18 months

**EADR = Evolutionary Acquisition Decision Review.**  
A periodic program management review conducted by the PEO. How often reviews occur depends upon progress being made in the program and the overall risk associated with the

**and formal**

**Read: Streamline or revamp the acquisition processes associated with IT**  
- we must deliver capability faster!  
Assent but

**doing about it**

**Document "X" contents are still being refined a/o March, 2002**

**CRITICAL!!!! MUST deliver capability to field in less than 18 months. IMDS goal is deliver capability every 6-7 months**



**U.S. AIR FORCE**

## **BACKGROUND**

### **Shortfalls**

- **Shortfalls in existing legacy systems**
  - **116+ stove-piped systems or applications**
  - **Lack interconnectivity with other logistics information systems**
  - **No deployable capability (support for AEF)**
  - **Systems use proprietary components**
  - **Major Problems: Data accuracy, Data timeliness, asset visibility**
  - **Difficult to make accurate and rapid inputs**
  - **Difficult to shape “data” into information and display in quality presentation formats**

**Ultimate goal: A single integrated maintenance enterprise**



**U.S. AIR FORCE**

# ACQUISITION STRATEGY

## Today

**116+ Stovepiped systems  
cold-war era / pre-AEF**

**No direct interface  
between Wings and Depot**

**Lacks interoperability**

**Soaring Maintenance cost**

**Lacks quality presentation  
format**

**Difficult to shape “data”  
into information**

**Lacks data integrity**

**Current systems hard to  
use**

**Expensive stovepipe  
upgrades ongoing**

**Lacks deployability**

## Enablers

**RIT**

**GCSS-AF**

**Single  
Architecture  
Enterprise**

**Emerging  
Technology**

**Web Enabled**

**Modular  
Contracting**

**Global Grid**

**Evolutionary  
Approach**

**COTS**

**Spiral  
Development**

**Modern GUI**

## Vision

**Single Integrated  
Maintenance  
Enterprise**

**Reduced Total  
Ownership Cost**

**Share data and  
processing resources  
across enterprise**

**Enterprise asset  
visibility**

**Employ new  
technology**

**User friendly and  
reduces maintenance  
workload**

**Communicate and  
operate across Wing,  
Depot, and HHQ**



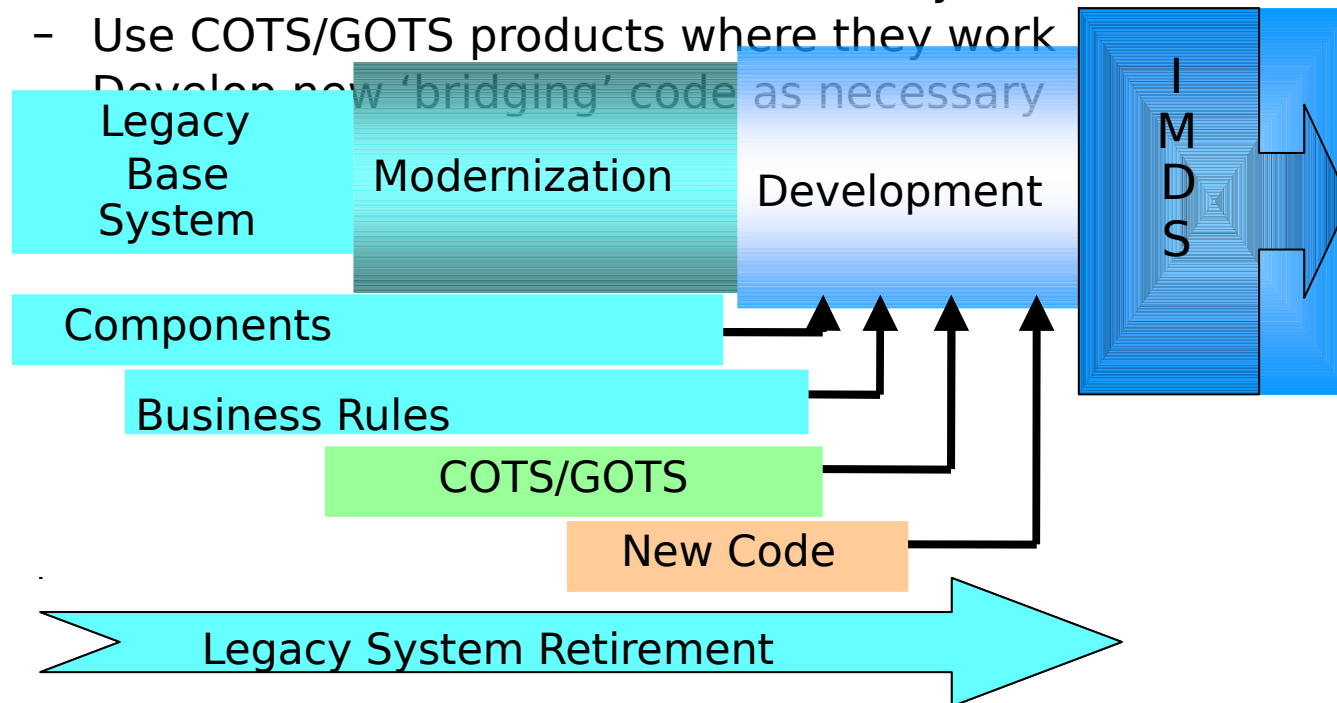
U.S. AIR FORCE

# ACQUISITION STRATEGY

## Hybrid Alternative

- **Develop IMDS by extending the Legacy Baseline (Core)**

- Select one System for Modernization (CAMS)
- Add/Use Functional Components
- Add Business Rule Based Functionality
- Use COTS/GOTS products where they work
- Develop new 'bridging' code as necessary



**Evolutionary**

**Increment**

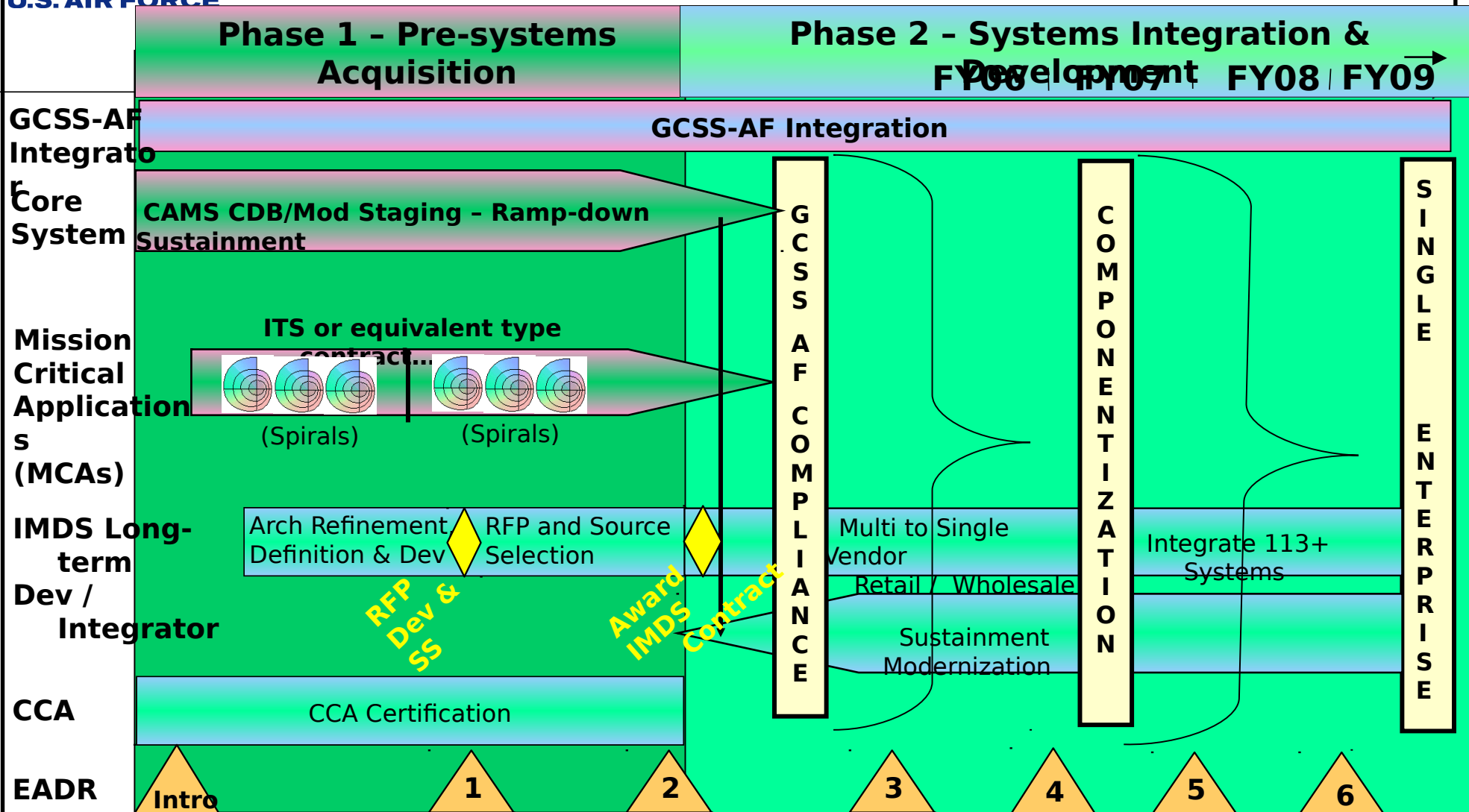




U.S. AIR FORCE

# ACQUISITION STRATEGY

## IMDS Acquisition Approach

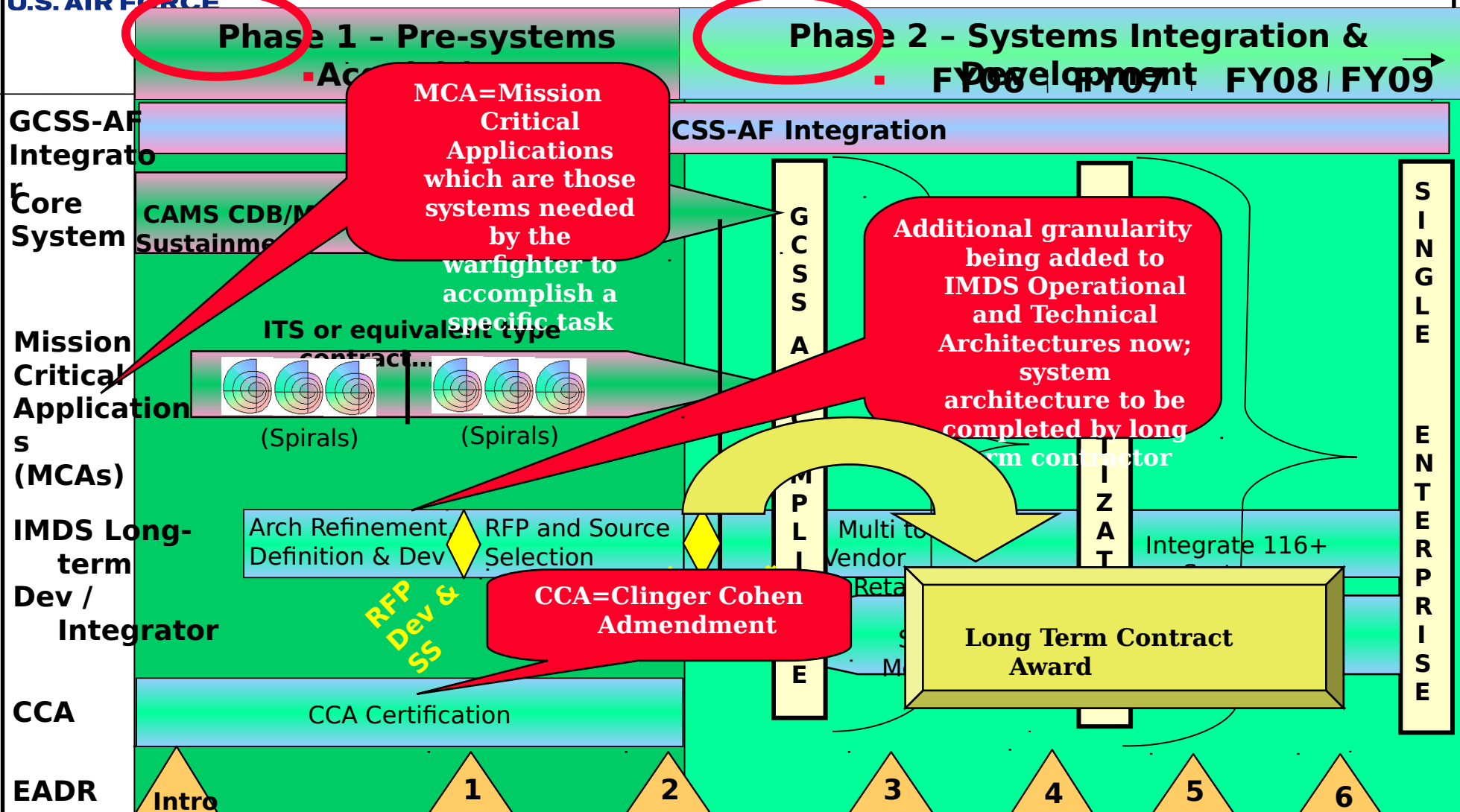




U.S. AIR FORCE

# ACQUISITION STRATEGY

## IMDS Acquisition Approach





**U.S. AIR FORCE**

# **ACQUISITION STRATEGY**

---

## **IMDS PHASE 1 - Mission Critical Applications**

- **PMEL Automated Maintenance Systems (PAMS)**
  - **Three Increment effort**
    - **Increment 1: 1 Mar 02 - Sep 02**
      - **Code roll to new hardware, bar code capability, reports**
  - **Primary Contractor: HQ SSG Software Factory**
- **Tool Accountability System (TAS)**
  - **Multiple increments**
    - **Increment 1: World-wide fielding of v2.2, completion of C4ISP**
    - **Increment 2+ : Web/database migration, and sustainment**
  - **Primary Contractor: IDIQ directed 8A contract to CDO Tech Inc**
- **Enhanced Maintenance Operations Center (EMOC)**
  - **Multiple Increments**
    - **Increment 1: Field existing v 1.0, accomplish C4ISP**
    - **Increment 2+: Add user screens, web/database migration, and sustainment**
  - **Primary Contractor from SSG ITS Contract tbd**



**U.S. AIR FORCE**

# **ACQUISITION STRATEGY**

---

## **IMDS PHASE 1 - Mission Critical Applications**

- **Other Mission Critical Applications “in the hopper”**
  - **Quality Assurance Systems**
  - **Training Systems**
- **Other IMDS associated work (not MCAs) “in the hopper”**
  - **Mapping of Metadata**
  - **Master Job Standard standardization**
  - **Maintenance Scheduling Ad Hoc Tool (MSAT)**
  - **Maintenance Operational Data Store for Reports**



U.S. AIR FORCE

# ACQUISITION STRATEGY

## IMDS Notional Phase 1

### Schedule

FY02

FY03

FY04

PAMS

Spiral 1

Code Roll

Spiral 2

Web  
Based/Enhance

Spiral 3

GCSS-AF Compliance

TAS

Spiral 1

C4ISP/Web

Spiral 2

Upgrade/Migration

Spiral 3

GCSS-AF  
Compliance

EMOC

Spiral 1

C4ISP/Screens/Enhanc  
e

Spiral 2

Migrate to  
CAMS/TBMCS

Spiral 3

GCSS-AF Compliance

Releases





**U.S. AIR FORCE**

## **Program Status, March 2002**

- **Phase 1 approved at initial EADR on 25 Feb 2002**
- **Date for EADR #2 tbd**
- **Contractors are encouraged to continue dialogue with Program Office over future of IMDS**